AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph beginning at page 8, line 14, with the following rewritten paragraph:

Another preferred embodiment of a heating roller fixation device is shown in FIG. 3. In FIG. 3, the reference numeral 21 denotes a fixing roller (heating roller), and numeral 25 denotes a pressure roller. The fixing roller 21 includes a base cylinder 30 made of a heat conductive metal such as aluminum, iron, stainless steel or brass, an elastic layer 22 covering the base cylinder 30 and made of, for example, a silicone rubber, and an offset preventing layer 23 covering the elastic layer 22 and made of a releasing material such as a room temperature vulcanizing (RTV) rubber, a silicone rubber, tetrafluoroethylene-perfluoroalkylvinylether copolymer (PFA) or a polytetrafluoroethylene (PTFE). The thickness of the elastic layer 22 is preferably 100-500 μm for reasons of formation of high grade fixed images and of suitable heat conductivity, while the thickness of the offset preventing layer 23 is preferably 10-50 μm for reasons of suitable heat conductivity and service life. Disposed in the base cylinder [[50]] 30 is a heater such as a halogen lamp. A temperature detector 29 is provided for measuring the temperature of the surface of the fixing roller 21. The temperature detector 29 is coupled with the heater 24 through a controller so that the temperature of the fixing roller 21 is maintained at a predetermined range. The pressure roller 25 has a core cylinder 26 made of a metal, an elastic layer 27 covering the core cylinder 26 and made of, for example, a silicone rubber and, optionally, an offset preventing layer 28 covering the elastic layer 27 and made of a releasing material such as PFA. The fixing roller 21 and the pressure roller 25 are in a pressure engagement with each other by a pressing member such as springs (not shown), so that the two rollers rotate in the direction opposite directions as shown by the arrows R21 and R25 by operation of drive means (not shown).

Please replace the paragraph beginning at page 16, line 33, with the following rewritten paragraph:

It is also preferred that the toner have a weight average particle diameter of 4 to 10 μm for reasons of obtaining suitable volume change Vt and area change St. The weight average particle diameter is measured using ~~Coulter counter~~ COULTER COUNTER TA-II or Coulter Multisizer II (manufactured by Coulter Electronics Inc.) with an aperture having a diameter of 100 μm.

Please replace the paragraph beginning at page 17, line 21, with the following rewritten paragraph:

The toner of the present invention can be prepared by any conventionally-known method such as a pulverization method in which a kneaded mixture containing ingredients of the toner is solidified and ground. The ingredients may be suitably blended using a ~~Henschel mixer~~ HENSCHEL MIXER or the like before kneading. The thus obtained kneaded mixture is cooled and ground. The grinding may be performed by a combination of a coarse pulverization with a hammer mill, Rotoplex (a grinder manufactured by Hosokawa Micron Co., Ltd.) or the like and succeeding fine pulverization with a jet air pulverizer or a mechanical pulverizer. When necessary depending upon the particle size distribution of the obtained toner, the toner will be adjusted to have a desired particle size distribution by an air classifier or the like.

Please replace the paragraph beginning at page 21, line 2, with the following rewritten paragraph:

It is also preferred that the toner used in the second aspect of the present invention have a weight average particle diameter of 4 to 10 μm, more preferably 4 to 8 μm, most preferably 4 to 6 μm for reasons of obtaining both suitable fixation efficiency and suitable resolution of the fixed toner image. The weight average particle diameter is measured using ~~Coulter counter~~ COULTER COUNTER TA-II or Coulter Multisizer II (manufactured by Coulter Electronics Inc.) with an aperture having a diameter of 100 μm.

Please replace the paragraph beginning at page 24, line 21, with the following rewritten paragraph:

The above components were mixed using a two axis kneader at 40°C. The kneaded mixture was cooled, pulverized and classified. The thus obtained mother toner had a weight average particle diameter of 10.5 μm. To the mother toner particles, 0.4 part of hydrophobic silica (R972 manufactured by Clariant Japan) as an external additive was mixed using ~~Hensehel mixer~~ HENSCHEL MIXER to obtain Toner (1). The Toner (1) was then mixed with a carrier which was obtained by coating ferrite particles having an average particle diameter of 80 μm with a silicone resin to obtain a Developer (1) having a toner content of 4 % by weight. The Toner (1) was measured for the melt viscosity η_{100} at 100°C and the melt viscosity η_{120} at 120°C, from which the ratio η_{100}/η_{120} was calculated. Using the Developer (1), the volume change Vt, the area change St, the fixation efficiency and the granularity of the Toner (1) were measured according to the following methods. The results are summarized in Table 1.

Please replace the paragraph beginning at page 31, line 18, with the following rewritten paragraph:

The above components were mixed using a two axis kneader at 110°C. The kneaded mixture was cooled, pulverized and classified. The thus obtained mother toner had a weight average particle diameter of 10.5 μm. To the mother toner particles, 0.4 part of hydrophobic silica (R972 manufactured by Clariant Japan) as an external additive was mixed using ~~Henschel mixer~~ HENSCHEL MIXER to obtain Toner (2). The Toner (2) was then mixed with a carrier which was obtained by coating ferrite particles having an average particle diameter of 80 μm with a silicone resin to obtain a Developer (2) having a toner content of 4 % by weight. The thus obtained toner was measured for the melt viscosity η_{100}, melt viscosity η_{120}, the volume change Vt, the area change St, the fixation efficiency and the granularity in the same manner as that described in Example 1. The results are shown in Table 1.

Please replace the paragraph beginning at page 32, line 13, with the following rewritten paragraph:

The above components were mixed using a two axis kneader at 100°C. The kneaded mixture was cooled, pulverized and classified. The thus obtained mother toner had a weight average particle diameter of 10.5 μm. To the mother toner particles, 0.4 part of hydrophobic silica (R972 manufactured by Clariant Japan) as an external additive was mixed using ~~Henschel mixer~~ HENSCHEL MIXER to obtain Toner (3). The Toner (3) was then mixed with a carrier which was obtained by coating ferrite particles having an average particle diameter of 80 μm with a silicone resin to obtain a Developer (3) having a toner content of 4 % by weight. The thus obtained toner was measured for the melt viscosity η_{100}, melt viscosity η_{120}, the volume change Vt, the area change St, the fixation efficiency and the

granularity in the same manner as that described in Example 1. The results are shown in Table 1.

Please replace the paragraph beginning at page 33, line 10, with the following rewritten paragraph:

The above components were mixed using a two axis kneader at 60°C. The kneaded mixture was cooled, pulverized and classified. The thus obtained mother toner had a weight average particle diameter of 10.5 μm. To the mother toner particles, 0.4 part of hydrophobic silica (R972 manufactured by Clariant Japan) as an external additive was mixed using ~~Henschel mixer~~ HENSCHEL MIXER to obtain Toner (4). The Toner (4) was then mixed with a carrier which was obtained by coating ferrite particles having an average particle diameter of 80 μm with a silicone resin to obtain a Developer (4) having a toner content of 4 % by weight. The thus obtained toner was measured for the melt viscosity η_{100}, melt viscosity η_{120}, the volume change Vt, the area change St, the fixation efficiency and the granularity in the same manner as that described in Example 1. The results are shown in Table 1.

Please replace the paragraph beginning at page 34, line 7, with the following rewritten paragraph:

The above components were mixed using a two axis kneader at 100°C. The kneaded mixture was cooled, pulverized and classified. The thus obtained mother toner had a weight average particle diameter of 10.5 μm. To the mother toner particles, 0.4 part of hydrophobic silica (R972 manufactured by Clariant Japan) as an external additive was mixed using ~~Henschel mixer~~ HENSCHEL MIXER to obtain Toner (5). The Toner (5) was then mixed with a carrier which was obtained by coating ferrite particles having an average particle

diameter of 80 μm with a silicone resin to obtain a Developer (5) having a toner content of 4 % by weight. The thus obtained toner was measured for the melt viscosity η_{100}, melt viscosity η_{120}, the volume change Vt, the area change St, the fixation efficiency and the granularity in the same manner as that described in Example 1. The results are shown in Table 1.

Please replace the paragraph beginning at page 35, line 4, with the following rewritten paragraph:

The above components were mixed using a two axis kneader at 90°C. The kneaded mixture was cooled, pulverized and classified. The thus obtained mother toner had a weight average particle diameter of 10.5 μm. To the mother toner particles, 0.4 part of hydrophobic silica (R972 manufactured by Clariant Japan) as an external additive was mixed using ~~Henschel mixer~~ HENSCHEL MIXER to obtain Toner (6). The Toner (6) was then mixed with a carrier which was obtained by coating ferrite particles having an average particle diameter of 80 μm with a silicone resin to obtain a Developer (6) having a toner content of 4 % by weight. The thus obtained toner was measured for the melt viscosity η_{100}, melt viscosity η_{120}, the volume change Vt, the area change St, the fixation efficiency and the granularity in the same manner as that described in Example 1. The results are shown in Table 1.

Please replace the paragraph beginning at page 36, line 1, with the following rewritten paragraph:

The above components were mixed using a two axis kneader at 60°C. The kneaded mixture was cooled, pulverized and classified. The thus obtained mother toner had a weight average particle diameter of 10.5 μm. To the mother toner particles, 0.4 part of hydrophobic

silica (R972 manufactured by Clariant Japan) as n external additive was mixed using ~~Henschel mixer~~ HENSCHEL MIXER to obtain Toner (7). The Toner (7) was then mixed with a carrier which was obtained by coating ferrite particles having an average particle diameter of 80 μm with a silicone resin to obtain a Developer (7) having a toner content of 4 % by weight. The thus obtained toner was measured for the melt viscosity η_{100}, melt viscosity η_{120}, the volume change Vt, the area change St, the fixation efficiency and the granularity in the same manner as that described in Example 1. The results are shown in Table 1.

Please replace the paragraph beginning at page 36, line 33, with the following rewritten paragraph:

The above components were mixed using a two axis kneader at 120°C. The kneaded mixture was cooled, pulverized and classified. The thus obtained mother toner had a weight average particle diameter of 10.5 μm. To the mother toner particles, 0.4 part of hydrophobic silica (R972 manufactured by Clariant Japan) as an external additive was mixed using ~~Henschel mixer~~ HENSCHEL MIXER to obtain Toner (8). The Toner (8) was then mixed with a carrier which was obtained by coating ferrite particles having an average particle diameter of 80 μm with a silicone resin to obtain a Developer (8) having a toner content of 4 % by weight. The thus obtained toner was measured for the melt viscosity η_{100}, melt viscosity η_{120}, the volume change Vt, the area change St, the fixation efficiency and the granularity in the same manner as that described in Example 1. The results are shown in Table 1.

Please replace the paragraph beginning at page 37, line 29, with the following rewritten paragraph:

The above components were mixed using a two axis kneader at 130°C. The kneaded mixture was cooled, pulverized and classified. The thus obtained mother toner had a weight average particle diameter of 10.5 μm. To the mother toner particles, 0.4 part of hydrophobic silica (R972 manufactured by Clariant Japan) as an external additive was mixed using ~~Henschel mixer~~ HENSCHEL MIXER to obtain Toner (9). The Toner (9) was then mixed with a carrier which was obtained by coating ferrite particles having an average particle diameter of 80 μm with a silicone resin to obtain a Developer (9) having a toner content of 4 % by weight. The thus obtained toner was measured for the melt viscosity η_{100}, melt viscosity η_{120}, the volume change Vt, the area change St, the fixation efficiency and the granularity in the same manner as that described in Example 1. The results are shown in Table 1.

Please replace the paragraph beginning at page 38, line 26, with the following rewritten paragraph:

The above components were mixed using a two axis kneader at 120°C. The kneaded mixture was cooled, pulverized and classified. The thus obtained mother toner had a weight average particle diameter of 10.5 μm. To the mother toner particles, 0.4 part of hydrophobic silica (R972 manufactured by Clariant Japan) as an external additive was mixed using ~~Henschel mixer~~ HENSCHEL MIXER to obtain Toner (10). The Toner (10) was then mixed with a carrier which was obtained by coating ferrite particles having an average particle diameter of 80 μm with a silicone resin to obtain a Developer (10) having a toner content of 4 % by weight. The thus obtained toner was measured for the melt viscosity η_{100}, melt viscosity η_{120}, the volume change Vt, the area change St, the fixation efficiency and the granularity in the same manner as that described in Example 1. The results are shown in Table 1.

Please replace the paragraph beginning at page 39, line 18, with the following rewritten paragraph:

The above components were mixed using a two axis kneader at 130°C. The kneaded mixture was cooled, pulverized and classified. The thus obtained mother toner had a weight average particle diameter of 10.5 μm. To the mother toner particles, 0.4 part of hydrophobic silica (R972 manufactured by Clariant Japan) as an external additive was mixed using ~~Henschel mixer~~ HENSCHEL MIXER to obtain Toner (11). The Toner (11) was then mixed with a carrier which was obtained by coating ferrite particles having an average particle diameter of 80 μm with a silicone resin to obtain a Developer (11) having a toner content of 4 % by weight. The thus obtained toner was measured for the melt viscosity η_{100}, melt viscosity η_{120}, the volume change Vt, the area change St, the fixation efficiency and the granularity in the same manner as that described in Example 1. The results are shown in Table 1.

Please replace the paragraph beginning at page 40, line 11, with the following rewritten paragraph:

The above components were mixed using a two axis kneader at 130°C. The kneaded mixture was cooled, pulverized and classified. The thus obtained mother toner had a weight average particle diameter of 10.5 μm. To the mother toner particles, 1.5 parts of hydrophobic silica (R972 manufactured by Clariant Japan) as an external additive was mixed using ~~Henschel mixer~~ HENSCHEL MIXER to obtain Toner (12). The Toner (12) was then mixed with a carrier which was obtained by coating ferrite particles having an average particle diameter of 80 μm with a silicone resin to obtain a Developer (12) having a toner content of 4 % by weight. The thus obtained toner was measured for the melt viscosity η_{100}, melt

viscosity η_{120}, the volume change Vt, the area change St, the fixation efficiency and the granularity in the same manner as that described in Example 1. The results are shown in Table 1.

Please replace the paragraph beginning at page 41, line 6, with the following rewritten paragraph:

The above components were mixed using a two axis kneader at 120°C. The kneaded mixture was cooled, pulverized and classified. The thus obtained mother toner had a weight average particle diameter of 10.5 μm. To the mother toner particles, 1.5 parts of hydrophobic silica (R972 manufactured by Clariant Japan) as an external additive was mixed using ~~Henschel mixer~~ HENSCHEL MIXER to obtain Toner (13). The Toner (13) was then mixed with a carrier which was obtained by coating ferrite particles having an average particle diameter of 80 μm with a silicone resin to obtain a Developer (13) having a toner content of 4 % by weight. The thus obtained toner was measured for the melt viscosity η_{100}, melt viscosity η_{120}, the volume change Vt, the area change St, the fixation efficiency and the granularity in the same manner as that described in Example 1. The results are shown in Table 1.

Please replace the paragraph beginning at page 42, line 5, with the following rewritten paragraph:

Examples [[13]] 14-24 and Comparative ~~Examples 7~~ Example 9

Please replace the paragraph beginning at page 42, line 13, with the following rewritten paragraph:

The above components were mixed using a two axis kneader. The kneaded mixture was cooled, pulverized and classified. To the mother toner particles, hydrophobic silica (R972 manufactured by Clariant Japan) as an external additive was mixed in an amount shown in Tables 2-1 through 2-3 using ~~Henschel mixer~~ HENSCHEL MIXER to obtain a toner. The toner was then mixed with a carrier which was obtained by coating ferrite particles having an average particle diameter shown in Tables 2-1 through 2-3 with a silicone resin to obtain a developer having a toner content as shown in Tables 2-1 through 2-3. The toner was measured for the average sphericity, bulk density, weight average particle diameter Xw and number average particle diameter Xn. The results are summarized in Tables 2-1 through 2-3. Using the developer, the surface roughness Ra of the toner image prior to the fixation was measured according to the method shown below. Further, using the developer, the fixation efficiency and the granularity of the toner were measured in the same manner as that in Example 1 except that a heating roller fixation device (surface pressure: 0.7×10^5 Pa·s; rollers 11 and 12 having silicone resin offset preventing layers 14 and 17) as shown in FIG. 2 was substituted for the fixation device as shown in FIG. 3. The results are summarized in Tables 2-1 through 2-3.

Please replace Table 2-3 at page 46 with the following Table:

Example	24			
Comparative Example		~~7~~	~~8~~	9
Average diameter of carrier (μm)	80	~~80~~	~~80~~	80
Content of toner in developer (wt. %)	3.2	~~5.5~~	~~5.0~~	6.0
Charging amount of developer (μc/g)	-31	~~-17~~	~~-32~~	-39
Bias DC voltage	-500	~~-550~~	~~-480~~	-560
Surface roughness Ra (μm)	1.6	~~2.2~~	~~2.1~~	3.0
Average sphericity	0.98	~~0.96~~	~~0.92~~	0.93
Bulk density (g/cm^3)	0.42	~~0.30~~	~~0.28~~	0.35
Amount of external additive (wt.%)	1.2	~~1.2~~	~~3.2~~	3.0
Xw/Xn	1.1	~~1.3~~	~~1.5~~	1.4
Xw (μm)	4.0	~~5.0~~	~~5.5~~	7.5
Transfer method	belt	~~belt~~	~~belt~~	belt
Granularity	0.25	~~1.12~~	~~1.09~~	0.99
Fixation efficiency (°C)	145	~~140~~	~~160~~	150

Please replace the paragraph beginning at page 47, line 10, with the following rewritten paragraph:

The above components were mixed using a two axis kneader. The kneaded mixture was cooled, pulverized and classified. To the mother toner particles, hydrophobic silica (R972 manufactured by Clariant Japan) as an external additive was mixed in an amount shown in Tables 3-1 through 3-3 using ~~Henschel mixer~~ HENSCHEL MIXER to obtain a toner. The toner was then mixed with a carrier which was obtained by coating ferrite particles having an average particle diameter shown in Tables 3-1 through 3-3 with a silicone resin to obtain a developer having a toner content as shown in Tables 3-1 through 3-3. The toner was measured for the average sphericity, bulk density, weight average particle diameter Xw and number average particle diameter Xn. The results are summarized in Tables 3-1 through 3-3. Using the developer, the surface roughness Ra of the toner image prior to the fixation was measured according to the method shown below. Further, using the developer, the fixation efficiency and the granularity of the toner were measured in the same manner as that in Example 1 using the fixation device as shown in FIG. 3. The results are summarized in Tables 3-1 through 3-3.